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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,956	08/10/2000	Timothy C. Loose	47079-00058	6262
30223	7590	04/25/2005	EXAMINER	
JENKENS & GILCHRIST, P.C. 225 WEST WASHINGTON SUITE 2600 CHICAGO, IL 60606			COBURN, CORBETT B	
			ART UNIT	PAPER NUMBER
			3714	

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/635,956

Applicant(s)

LOOSE, TIMOTHY C.

Examiner

Corbett B. Coburn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-23 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-23 and 27-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. On 14 December 2004, the Board of Patent Appeals and Interferences issues an order reversing the Examiner's rejection of the claims. A search of the prior art revealed the existence of a previously undiscovered reference (Mathis et al., US Patent Number 5,380,008) that reads on Applicant's invention. Because of this discovery, Examiner must reopen prosecution of the case.

### *Claim Interpretation*

2. "Configuration data" is interpreted to be data needed to correctly control the slot machine reels. Applicant's definition of "configuration data" from page 5 of the specification corresponds to the definition of "device driver". *Microcomputers* (Sandon, IBM Microelectronics Division, 1999, <http://www.mrw.interscience.wiley.com/eeee/63/1663/W.1663-4.html>), which defines device drivers as:

#### Device Drivers

Among the services that an operating system provides to an application program is I/O processing. When an application specifies that a particular data stream is to be written to the display, or that a new file should be created on the hard disk, or the next keystroke should be read in, operating system code is executed to perform the requested function.

The request from the application is abstract, in the sense that it is made independent of which particular device or even class of device will be involved in satisfying the request. The I/O manager has knowledge of different classes of devices, but does not have specific information on how to control every possible I/O device that might be attached to the microcomputer.

The device driver is the piece of code that does have device specific information. When a particular device is installed, the corresponding device driver software is installed as well. When the I/O manager gets a request to perform a particular function on a particular type of device, it passes the request to the appropriate

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device driver, which turns the request into the correct control sequence for that device.

As is readily apparent, the configuration data disclosed by Applicant is the device driver for driving the slot machine reels. It is a device specific piece of code that contains information concerning physical parameters (i.e., number of symbols on a reel, number of steps in the motor, how to drive the motor) that allows the central processing unit of the game to issue high level commands (i.e., abstract requests independent of the which particular device or class of devices involved in satisfying the request) to the I/O manager (i.e., local controller) which turns the request into the correct control sequence for that device.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7-14, 16, 18, 20, 21, & 27-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Mathis et al (US Patent Number 5,380,008).

**Claims 1, 9, 20:** Mathis teaches a slot machine (10) with a central processing unit (52) for issuing high level commands for operating the slot machine in response to a wager.

There is a reel mechanism including a motor (62), a symbol-bearing reel (22), and a reel driver (58a). The motor includes a rotatable shaft and the reel is mounted to the shaft.

(Fig 4) The reel driver includes a local microcontroller (58a) distinct from and coupled to the central processing unit (52). The reel driver is coupled to the motor to cause the

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motor to rotate the reel. The local microcontroller performs low-level reel driver operations independent from the central processing unit. (Col 10, 55-65) Mathis teaches that the central processing unit sends configuration data to the local microcontroller for configuring the local microcontroller to a reel spinning game conducted with the slot machine. Col 10, 48-49 teaches processing the starting position of the reel and retransmitting that information to the local microprocessor. This data is necessary to correctly control the reels and is "configuration data".

Furthermore, Mathis teaches that one of the advantages of the described system is that it permits a system peripheral to be redesigned to meet a new requirement rather than redesigning the entire primary microprocessor. (Col 11, 18-20) Such "plug and play" capability inherently requires that the configuration data be downloaded from the central processing unit to the local microprocessor.

The local microprocessor is an I/O manager. It is extremely well known in the art to download configuration data in the form of device drivers to I/O controllers to allow device independence. In fact, this is the only way to achieve device independence. If the CPU does not download the configuration data to the local microprocessor (I/O manager), then switching the peripheral device (i.e., reel) requires the switching of the local microprocessor. Mathis teaches device independence (Col 11, 18-20), therefore, Mathis must inherently teach downloading configuration data from the CPU to the local microprocessor.

Thus Mathis both explicitly teaches transmitting configuration data (reel initial position) to the local microcontrollers and inherently teaches such transmission in order

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to support device independence.

**Claim 2:** Mathis teaches that in response to actuation by a player, the reel is rotated and stopped to place the symbols of said reel in visual association with one or more pay lines.

(Fig 6) Furthermore, this is how slot machines operate.

**Claims 3, 11:** Mathis teaches that low-level reel driver operations include monitoring said reel and at least partially controlling its position. (Col 10, 55-65)

**Claim 4:** The local microcontroller monitors said reel by sampling its state multiple times per second in real time (i.e., counting the number of pulses received), and responds with control commands for controlling the position of said reel. (Col 10, 55-65)

**Claim 5:** The local microcontroller is serially connected to said central processing unit. (Fig 2)

**Claims 7, 10:** The central processing unit issues high level commands to said local microcontroller, said high-level commands including a start spin command for spinning said reel and a stop command for stopping said reel at a specified stop position. (Col 10, 55-65)

**Claims 8, 13:** The reel includes an encoder for indicating the position of said reel, and wherein said reel driver includes an optical detector (64) for reading said encoder, said local microcontroller being coupled to said optical detector to monitor the position of said reel. (Col 10, 29-36 & Fig 4)

**Claim 12:** Claim 12 is a combination of claims 1, 3 and 7.

**Claims 14, 16, 18, 21:** The configuration data includes at least one of the type of slot machine, a number of symbols on said reel, how to drive said motor, and a number of

steps in said motor if said motor is a stepper motor. Mathis teaches that the position detector detects the position of the reel and transmits that information to the CPU where it is processed and retransmitted to the local microcontroller as the initial position. (Col 10, 45-50) The local microcontroller uses this information to determine when to stop the reel to display the chosen symbol. This can only be done if the local microprocessor also knows the number of symbols on the reel. In order to support the device independence feature disclosed by Mathis (Col 11, 18-20), this information must be downloaded from the CPU to the local microcontroller.

**Claim 23:** Mathis teaches configuring a slot machine to a reel spinning game conducted with the machine including a physical symbol-bearing reel (22) including an encoder (64) for indicating a position of said reel. Mathis teaches providing a reel controller (58a) for performing low-level operations related to movement of said reel and a central processing unit (52) for issuing high-level commands to said reel controller related to the movement of said reel. Mathis teaches device independence. (Col 11, 18-20) This means that Mathis inherently teaches sending a command from said central processing unit to said reel controller to determine a type of said encoder; determining the type of said encoder with said reel controller; sending configuration data from said central processing unit to said reel controller to configure said reel controller to the reel spinning game; and using said reel controller to compare the determined type of said encoder with said configuration data. If Mathis does not perform these steps, Mathis cannot possibly provide device independence.

**Claim 28:** Mathis teaches providing a physical symbol-bearing reel (22) including an

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encoder (64) for indicating a position of said reel; providing a reel controller (58a) for performing low-level operations related to movement of said reel; providing a central processing unit (52) for issuing high-level commands to said reel controller related to the movement of said reel; sending a command from said central processing unit to said reel controller to determine a type of said encoder; and determining the type of said encoder with said reel controller, which includes causing a motor to spin said reel and detecting a physical characteristic of said encoder. (Col 10, 20-45) Mathis teaches that this finds the initial position of the reel. The position of the reel is a physical characteristic of the encoder.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15, 17, 19, 20 & 23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mathis.

**Claims 15, 17, 19, 22, 23:** Mathis teaches the invention substantially as described but does not specifically teach that in response to receiving said configuration data, said local microcontroller processes said configuration data and reports a status of configuration of said local microcontroller back to said central processing unit. Error detection and reporting is extremely well known to the art. If an error occurs in a slot machine and is not detected, vast sums may be wrongly paid to players. Equally bad, the players may



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not receive winnings to which they are entitled. This is prohibited by law. Error detection and reporting is used to ensure that no such errors occur. Mathis must either inherently carry out error detection and reporting, or it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Mathis to carry out error detection and reporting in order to prevent under- or over-payment and to comply with the law.

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mathis in view of Sakamoto (US Patent Number 6,315,663).

**Claim 29:** Mathis teaches configuring a slot machine to a reel spinning game conducted with the machine. There is a physical symbol-bearing reel (22), a reel controller (58a) for performing low-level operations related to movement of said reel; and a central processing unit for issuing high-level commands to said reel controller related to the movement of said reel, Mathis does not explicitly teach that the high-level commands include a command for informing said reel controller of at least one of an acceleration profile for accelerating said reel and a deceleration profile for decelerating said reel.

Sakamoto teaches an acceleration or deceleration profile for accelerating and decelerating the reels. (Col 12, 40-61) Having reels accelerate and decelerate at varying speeds adds visual interest to the games. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Mathis in view of Sakamoto to have the high-level commands include a command for informing said reel controller of at least one of an acceleration profile for accelerating said reel and a deceleration profile for decelerating said reel in order to add visual interest to the games.

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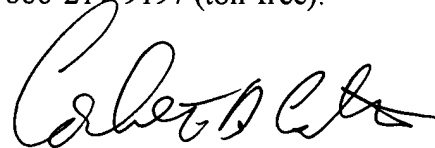
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corbett B. Coburn whose telephone number is (571) 272-4447.

The examiner can normally be reached on 8-5:30, Monday-Friday, alternate Fridays off.

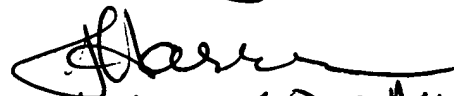
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica Harrison can be reached on (571) 272-4449. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Corbett B. Coburn  
Examiner  
Art Unit 3714

*Re-opening approved*



*Acting SPE AU 3714*  
JESSICA HARRISON  
PRIMARY EXAMINER



E. R. Kazensko  
Director  
Technology Center 3700